

# **Public Education and Enforcement Research Study (PEERS) Phase 1 and Phase 2**

**Cooperative Agreement  
DTFR53-03-H-00019**

## **Final Report**

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Washington, DC 20590

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## ***EXECUTIVE SUMMARY***

The goal of developing, implementing and testing a core highway-rail grade crossing safety program based on education and enforcement which could be easily adaptable to numerous communities, was accomplished. This template may serve as a baseline for future efforts. The goal of education and enforcement elements is to modify, alter or shape behavior necessary to cross railroad tracks safely and legally. How these communities have gone about this has shown the diversity in which the use of funding was utilized. What may have been a valuable tool in one community was found not to be effective or even considered in another community.

Education and enforcement efforts are labor intensive and finding the right balance between the two is very challenging. The emphasis is to help the communities recognize the lasting effect and value obtained from increased railroad safety programming. Examples of successful PEERS communities, such as Arlington Heights, proved that providing the impetus to move railroad safety into the forefront can be done if seed funds are made available.

Data analyzed at three highway-rail crossings in Arlington Heights indicate that its education and enforcement program did reduce violations in a statistically significant manner. A 72 percent (72%) reduction in type 3 (drive around) violations, along with a 29 percent (29%) reduction in type 2 violations (gates are descending, but not completely down) was achieved. However, Type 1 violations (gates are still up, but lights have begun to flash) showed an increase of 15 percent (15%) over the baseline rate of violations.

Implementation of the education and enforcement elements required training of staff both in Operation Lifesaver presentation techniques, as well as best practices for effective enforcement campaigns when on or near the tracks. Most of these types of “station blitzes” were modeled after Metra’s long standing programs and conducted primarily in the Chicago suburban communities. Fifty people were trained as Operation Lifesaver presenters and another 35 to 40 completed the Grade Crossing Collision Investigation (GCCI) course.

The enforcement element is consistent and does not deviate from traditional police responsibilities to enforce laws. If residents violate traffic laws, then they are issued citations. Writing tickets for violating railroad laws should be no different. People typically do not run red lights because of a long standing and sustained effort to remind drivers of the punitive repercussions for such actions. However, allowing a commuter to run across a crosswalk when crossing bells and lights are activated has been accepted for so long that it is perceived as acceptable behavior.

Naperville, for example, found applying enforcement easier and more straight forward than the education. This is probably true of most police departments who are used to dealing with special grants to conduct other enforcement initiatives, such as seat belt and DUI campaigns. Another community, Mount Prospect, integrated the Operation Lifesaver program into the duties of their community liaison officers so that they could go to schools and speak about railroad safety much like they go talk about the D.A.R.E program.

The educational side of highway-rail crossing safety is an area in which “creative redundancy,” conveying the same safety message many different ways, has great potential and flexibility. With reality television and mass media creating the stimuli driven culture, traditional methods of educating people needs to be overhauled. An interactive kiosk was developed by Health World Children’s Museum, and has captured the interest of school age children.

Overall, 71 percent (71%) of PEERS grants went toward education and 29 percent (29%) toward enforcement. Labor costs were 47 percent (47%) of the total grant expenditures, largely due to a very significant amount of enforcement and education being conducted by police officers on overtime. If labor can be performed as part of regular duties, a great savings could be achieved.

## ***TABLE OF CONTENTS***

<b>Section</b>	<b>Page</b>
Introduction	1
Background	1
Implementation of Phase 1	4
Development and Implementation of Phase 2	5
Subgrantee Summary	7
Subgrantee Synopsis	10
Conclusion	24

## ***ATTACHMENTS***

1. ICC Call For Proposals	26
2. Media Examples and News Clips	34
3. ICC Regular Updates to PEERS Participants	180

## 1. INTRODUCTION

Throughout the development of the Federal Railroad Administration's (FRA) rule, *Use of Locomotive Horns at Highway-Rail Grade Crossings*, much discussion was generated about the various types of alternatives available to improve safety at highway-rail grade crossings. There is a considerable body of professional knowledge and literature concerning the effectiveness of many engineering types of highway-rail grade crossing safety improvements, but relatively little, if any, quantitative knowledge of the ability of education and enforcement programs to improve safety at highway-rail grade crossings.

In order to remedy this lack of knowledge, Illinois' congressional delegation, led by Senator Richard Durbin, suggested that the Illinois Commerce Commission (ICC) and the FRA collaboratively develop a program to quantify the effectiveness of various education and enforcement programs to reduce traffic law violations at highway-rail grade crossings. FRA and ICC agreed and first met in March 2001 to initiate development of a research program.

The goal of the project was to implement a variety of sustained education and enforcement programs and use control sites within three communities to quantitatively measure the before and after change in the motoring public's adherence to traffic safety laws. ICC has primarily been responsible for the development and implementation of the project as a whole, including the distribution and administration of the education and enforcement grants, while FRA has primarily been responsible for the violation data collection and analysis to determine the effectiveness of the education and enforcement campaign.

## 2. BACKGROUND

The Public Education and Enforcement Research Study (PEERS) initiative got under way in March 2001 when representatives of the ICC, FRA, Union Pacific Railroad, Burlington Northern Santa Fe Railway, Metra and the Villages of Arlington Heights and Downers Grove met to review railroad safety concerns within the two villages. Shortly thereafter, the Village of Bartlett and City of Macomb were added as participants in the PEERS project providing a total of four communities in Phase 1 of PEERS as shown in the table below.

Table 1. List of Phase 1 Communities.

City	Residents	Public At-Grade Crossings	Collisions at Public Crossings 1/1/1990 Through 12/31/2000			Fatalities	Injuries
			Vehicles	Pedestrians	Total		
Arlington Heights	76,031	10	6	4	10	7	1
Bartlett	36,706	11	6	0	6	1	1
Downers Grove	48,724	6	8	3	11	4	2
Macomb	18,558	17	18	2	20	6	5
<b>Total</b>	<b>180,019</b>	<b>44</b>	<b>38</b>	<b>9</b>	<b>47</b>	<b>18</b>	<b>9</b>

ICC and FRA staff met with the four participants numerous times in order to develop a customized railroad safety program designed to meet the unique needs of each participant. Ultimately, all four participants designed programs that were similar and had a common set of core elements:

**Education Program Core Elements:**

- Cable access and local radio programs – brief 30 second public service announcements (PSA) and more in-depth 5, 10 and 30 minute safety programs. PSAs to run consistently throughout program.
- Continuous loop videos were played at points of interest throughout town, such as commuter rail stations, community administrative offices, shopping centers, schools, etc. Use of PSAs already developed was thereby maximized.
- Safety poster contests in local schools. Winning entries were published in a calendar to be distributed within the community.
- “It’s the Law” safety poster campaign. Safety posters were placed in storefront windows near Metra commuter rail stations to reinforce the safety message.
- Community telephone systems were used to run railroad safety messages while callers to village offices were on hold.
- Press releases and safety columns promoting railroad safety were run in local newspapers, community newsletters and media outlets.
- Railroad safety messages were inserted into utility bills, or other types of routine mailings, on a regular basis. The use of pre-existing routine mailings to residents increased community awareness at minimal cost.
- Community and Village staff, such as police officers, fire fighters, emergency medical technicians and media/public affairs specialists, were trained as Operation Lifesaver presenters. In order to provide a consistent and informed safety message to the community, it is desirable to have staff trained to utilize the standard Operation Lifesaver presentation techniques.
- Operation Lifesaver presentations were then made by staff that had recently undergone training, as well as staff members who were already certified as Operation Lifesaver presenters. Once staff had been trained, they were required to conduct at least four presentations to become certified as an Operation Lifesaver presenter.
- Town hall meetings were organized that highlighted the highway-rail grade crossing safety and trespass prevention program. Several communities used a town hall meeting to initiate their PEERS program and passed resolutions by the Village Council in support of railroad safety.
- Sustained use of town hall meetings and local cable access programs were effective in keeping the railroad safety message fresh in the minds of village residents.

**Enforcement Program Core Elements:**

- Positive reinforcement campaigns were implemented to reward motorists and pedestrians for good behavior. Coupons for a cup of coffee, or an Operation Lifesaver trinket, were distributed to motorists and pedestrians who complied with traffic safety laws.
- Enhanced routine patrol of entire right-of-way to deter trespassing was implemented. Police officers engaged in additional patrols along the railroad right-of-way to reinforce the message that railroad property is private property and that trespassing is not only

dangerous, but unlawful, as well. Trespassing citations resulted in fines of \$150 to those convicted.

- Focused enforcement details (often called Blitzes) were conducted at identified hot spots where traffic law violations consistently occur. The fine for disregarding a warning device is \$250 for a first offense in Illinois with subsequent offenses resulting in a fine of \$500, along with possible suspension of the motor vehicle registration.
- Trooper on the Train program. Railroads ran special trains to provide law enforcement and members of the judiciary first-hand experience of what locomotive engineers see routinely.
- Specialized training was provided for law enforcement personnel and other first responders who must investigate, or respond to collisions, through successful completion of the Grade Crossing Collision Investigation (GCCCI) course.

Once the basic education and enforcement programs were developed, it was collectively decided by ICC, FRA and the other participants, that measuring the effectiveness of the education and enforcement programs, was required. Since neither ICC, nor the FRA had the ability to conduct an effectiveness evaluation with existing internal resources, in September 2001, ICC issued a request for proposals (RFP) to select a vendor to develop and conduct an effectiveness evaluation. With 44 highway-rail grade crossings in the four communities, a set of ten highway-rail grade crossings was proposed by ICC as control locations to collect violation data.

Table 2. Proposed Control Highway-Rail Grade Crossings.

City	Street	GX ID	RR	Passenger?	AADT	Trains	1/1/1990 - 12/31/2000		
							Incidents	Fatalities	Injuries
Arlington Heights	Arlington Heights Rd	176923K	UP	Metra	22,500	70	6	3	1
Arlington Heights	Dunton Ave	176925Y	UP	Metra	109	70	0	0	0
Arlington Heights	Evergreen Ave	176924S	UP	Metra	109	70	0	0	0
Bartlett	Oak Ave	372206B	Metra	Metra	12,400	68	0	0	0
Bartlett	Western Ave	372207H	Metra	Metra	109	68	1	0	0
Downers Grove	Fairview Ave	079532A	BNSF	Metra & Amtrak	16,200	160	4	1	0
Downers Grove	Belmont Rd	079537J	BNSF	Metra & Amtrak	17,300	160	2	2	0
Macomb	Ward Street	072906E	BNSF	Amtrak	9,000	20	1	0	0
Macomb	Lafayette St	072896B	BNSF	Amtrak	11,600	20	1	0	0
Macomb	Jackson St	072890K	BNSF	Amtrak	15,500	20	2	3	0
							17	9	1
							<b>Total: 1/1/1990 - 12/31/2000</b>		
							47	18	10

The preferred vendor would be responsible for collecting, organizing and analyzing data from the ten control highway-rail grade crossings. ICC received three responses to the RFP. One response was not valid and the two other responses ranged in cost from \$240,000 to \$440,000, which exceeded the tentative budget for the entire program of \$205,000. The two qualified vendors estimated a cost of between \$4 and \$6 per gate activation to use video surveillance to monitor the control set of highway-rail crossings of ten highway-rail grade crossings. A total of 60,000 to 85,000 gate activations were to be sampled at ten highway-rail crossings in the four participating cities. In comparison, an ongoing study in Coon Rapids, Minnesota was spending approximately \$9 per gate activation so the costs provided by the two vendors were not unreasonable, simply too much for the budget.

This situation caused the entire PEERS project to come to a halt while FRA and ICC evaluated options, including reducing the number of crossings monitored, or the amount of data captured per crossing. Ultimately, in September 2002, FRA agreed to contract with Volpe National Transportation Systems Center (Volpe) to conduct the violation data collection and to prepare a report documenting the ability of the education and enforcement programs to reduce traffic law violations in a statistically significant manner.

Video surveillance would be used to record train movements through the crossing and identify and count observed traffic law violations. By July 2003, Volpe had installed video surveillance and communications equipment at six highway rail crossings: three in Arlington Heights and three in Macomb. Video surveillance and communications equipment was installed at Bartlett's two highway-rail grade crossings in October 2003. There would be no violation data collection at Downers Grove due to the high cost of capturing data on the BNSF line which averages over 160 daily train movements.

During July and August 2003, two months of baseline pre-implementation traffic violation data was collected at Arlington Heights and Macomb with two months of data collection scheduled for Bartlett during November and December 2003 once some engineering issues with Metra had been resolved. The education and enforcement programs would then run for 12 months and be followed by a two month post-implementation violation data collection to determine the long-term effects of the education and enforcement programs.

From the first time ICC and FRA staff met in March 2001, it took a total of 30 months before the four Phase 1 communities were able to begin implementing their education and enforcement programs.

### ***3. IMPLEMENTATION OF PHASE 1***

On September 1, 2003, Arlington Heights, Downers Grove and Macomb initiated their education and enforcement programs. Bartlett began their program on December 1, 2003, due to problems with the video surveillance equipment to be installed to collect the baseline violation data. The four initial cities in Phase 1 were funded with grants from the ICC of \$25,625 each while FRA's contribution to Phase 1 activities was to fund the cost of the violation data collection and analysis being conducted by Volpe. The four communities implemented the basic core program outlined earlier.



#### 4. DEVELOPMENT AND IMPLEMENTATION OF PHASE 2

In September 2003, ICC was informed that it would receive \$496,750 from the FRA to expand the PEERS program into a second phase. The ICC and FRA entered into Cooperative Agreement DTFR53-03-H-00019 dated September 24, 2003. The original agreement specified an end date of September 30, 2004. On September 2, 2004, FRA approved an extension of time until December 31, 2004 to permit our grantees additional time to allocate their funds. Due to delays in processing requests for payment at the ICC as well as additional delays with grantees being able to implement their programs in a timely manner, a second extension of time was requested and FRA approved the ultimate end date of September 30, 2005. This Final Report is now being provided as required according to the terms of the Cooperative Agreement.

ICC staff utilized several techniques to distribute the \$496,750 made available for Phase 2 activities. The first four cities to be added to Phase 2, Des Plaines (\$40,000), Decatur (\$40,000), Naperville (\$50,000) and North Chicago (\$25,000), were recommended for PEERS funds by staff of Senator Durbin's office. After being contacted by ICC staff, all four communities agreed to participate in Phase 2. The four communities were awarded a total of \$155,000 of the \$496,750 leaving a balance of \$341,750.

During September and October 2003, ICC staff identified several downstate communities with demonstrated railroad safety concerns and attempted to recruit them into the PEERS program. Staff contacted and made offers of PEERS funds to Galesburg (\$20,000), Granite City (\$20,000) and Mount Vernon (\$20,000). Galesburg and Mount Vernon agreed to participate in Phase 2, however, Granite City was unable to participate due to financial constraints within the City. After awarding PEERS grants to Galesburg and Mount Vernon, there remained a balance of \$301,750.

In order to distribute the balance of \$301,750, staff developed and issued a call for proposals to all communities, railroad safety related non-profit organizations and railroads within Illinois. A copy of the Call for Proposals is included as Attachment 1. A total of 15 proposals were received from entities throughout Illinois. Staff evaluated the proposals and after making several minor modifications, was able to accept all the proposals and award the remaining \$301,750 as illustrated in Table 3.

Table 3. Results of Call for Proposals.

Grantee	Amount	Grantee	Amount
Arlington Heights	\$10,221	Illinois Operation Lifesaver	\$20,000
Dixmoor	\$25,000	LaGrange	\$20,000
Dolton	\$14,700	Lansing	\$25,005
Elburn	\$18,056	Metra Rail System	\$50,000
Evergreen Park	\$7,928	Mount Prospect	\$25,000
Frankfort	\$5,030	Park Ridge	\$24,992
Glenwood	\$12,620	Western Springs	\$9,695
Health World - Kiosk	\$28,003		
Health World - Monitors	\$5,500	<b>Call for Proposal Total</b>	<b>\$301,750</b>

The process of getting the funds into the hands of the grantee proved to be cumbersome. Once the ICC and the grantee had entered into a contract specifying the grantee's commitment, ICC

then submitted a request for payment to FRA. FRA would then electronically transfer the funds for each grant agreement to the ICC. ICC in turn issued a voucher for payment to the Illinois Comptroller's office who then issued a check to the ultimate end recipient. The payment process took approximately 60 days on average between the date an agreement was signed and the date a check actually ended up in the hands of the grantee. Table 4 provides a complete list of all grantees in Phase 1 and 2.

Table 4. List of PEERS Phase 1 and 2 Grantees.

City	County	Agreement Number	Date Executed	Phase 1 ICC Amount	Phase 2 FRA Amount	Total Amount
Arlington Heights - Original	Cook	2003-01	6/12/2003	\$25,625	\$0	\$25,625
Arlington Heights - Signage	Cook	2003-09	1/21/2004	\$0	\$10,221	\$10,221
Bartlett	Cook	2003-02	6/13/2003	\$25,625	\$0	\$25,625
Decatur	Macon	2003-08	12/12/2003	\$0	\$40,000	\$40,000
Des Plaines	Cook	2003-05	1/26/2004	\$0	\$40,000	\$40,000
Dixmoor	Cook	2003-10	1/14/2004	\$0	\$25,000	\$25,000
Dolton	Cook	2003-11	3/30/2004	\$0	\$14,700	\$14,700
Downers Grove	DuPage	2003-03	6/3/2003	\$25,625	\$0	\$25,625
Elburn	Kane	2003-13	1/16/2004	\$0	\$18,056	\$18,056
Evergreen Park	Cook	2003-14	1/14/2004	\$0	\$7,928	\$7,928
Frankfort	Will	2003-15	1/16/2004	\$0	\$5,030	\$5,030
Galesburg	Knox	2003-23	1/22/2004	\$0	\$20,000	\$20,000
Glenwood	Cook	2003-16	1/20/2004	\$0	\$12,620	\$12,620
Healthworld - Kiosk	Cook	2003-26	4/9/2004	\$0	\$28,003	\$28,003
Healthworld - Monitors	Cook	2003-17	1/19/2004	\$0	\$5,500	\$5,500
Illinois Operation Lifesaver	Lake	2003-28	4/15/2004	\$0	\$20,000	\$20,000
LaGrange	Cook	2003-18	2/3/2004	\$0	\$20,000	\$20,000
Lansing	Cook	2003-19	1/21/2004	\$0	\$25,005	\$25,005
Macomb	McDonough	2003-04	6/6/2003	\$25,625	\$0	\$25,625
Metra Commuter Railroad	Cook	2003-27	4/5/2004	\$0	\$50,000	\$50,000
Mount Prospect	Cook	2003-20	1/14/2004	\$0	\$25,000	\$25,000
Mount Vernon	Jefferson	2003-25	2/2/2004	\$0	\$20,000	\$20,000
Naperville	DuPage	2003-06	12/9/2003	\$0	\$50,000	\$50,000
North Chicago	Lake	2003-07	4/5/2004	\$0	\$25,000	\$25,000
Park Ridge	Cook	2003-21	2/19/2004	\$0	\$24,992	\$24,992
Western Springs	DuPage	2003-22	2/11/2004	\$0	\$9,695	\$9,695
<b>Total</b>				<b>\$102,500</b>	<b>\$496,750</b>	<b>\$599,250</b>

Between September 2003 and February 2005, all grantees were implementing their education and enforcement programs to one degree or another. As the violation data collection and analysis was proceeding, it was soon evident that there were not sufficient resources to process all the data being collected in a timely manner. Therefore, it was collectively decided by ICC and FRA to archive data collected at the two locations in Bartlett and the three locations in Macomb and focus on processing and tabulating the data from the three locations at Arlington Heights. If additional resources become available later, the data from Bartlett and Macomb will be processed, however the overall results of PEERS now hinge on the data collected and analyzed from Arlington Heights' three locations.

Arlington Heights was required to follow the original 12 month implementation plan and ceased their education and enforcement programs on August 30, 2004 in order to provide valid “after” or post-implementation violation data. This period was critical in determining what the long-term impact of the program may have once active education and enforcement efforts ceased. A complete report summarizing the data collected and analyzed at Arlington Heights shall be available from the FRA.

## 5. SUBGRANTEE SUMMARY

Organizations that the ICC granted awards to are referred to as Subgrantees in the language of the FRA Cooperative Agreement. Table 5 provides a summary of each subgrantee’s proposed expenditures based on the two budget categories of education and enforcement.

Table 5. Combined budget for Phase 1 and 2.

City	Education* Materials \$	Education* Labor \$	Enforcement Materials \$	Enforcement Labor \$	Total Budget \$
Arlington Heights - Original	\$8,250.00	\$5,610.00	\$0.00	\$11,765.00	\$25,625.00
Arlington Heights - Signage	\$2,300.00	\$0.00	\$0.00	\$7,921.00	\$10,221.00
Bartlett	\$23,825.00	\$900.00	\$0.00	\$900.00	\$25,625.00
Decatur	\$31,000.00	\$1,000.00	\$500.00	\$7,500.00	\$40,000.00
Des Plaines	\$20,800.00	\$7,200.00	\$0.00	\$12,000.00	\$40,000.00
Dixmoor	\$3,420.00	\$7,180.00	\$3,600.00	\$10,800.00	\$25,000.00
Dolton	\$0.00	\$3,500.00	\$0.00	\$11,200.00	\$14,700.00
Downers Grove	\$2,509.00	\$4,611.00	\$0.00	\$18,505.00	\$25,625.00
Elburn	\$3,243.00	\$7,264.00	\$72.00	\$7,477.00	\$18,056.00
Evergreen Park	\$6,484.00	\$1,444.00	\$0.00	\$0.00	\$7,928.00
Frankfort	\$1,580.00	\$3,000.00	\$0.00	\$450.00	\$5,030.00
Galesburg	\$1,562.80	\$12,253.75	\$0.00	\$6,183.45	\$20,000.00
Glenwood	\$2,076.00	\$220.00	\$8,976.00	\$1,348.00	\$12,620.00
Healthworld - Kiosk	\$14,003.00	\$14,000.00	\$0.00	\$0.00	\$28,003.00
Healthworld - Monitors	\$0.00	\$5,500.00	\$0.00	\$0.00	\$5,500.00
Illinois Operation Lifesaver	\$20,000.00	\$0.00	\$0.00	\$0.00	\$20,000.00
LaGrange	\$4,500.00	\$6,950.00	\$1,800.00	\$6,750.00	\$20,000.00
Lansing	\$2,325.00	\$7,560.00	\$0.00	\$15,120.00	\$25,005.00
Macomb	\$6,300.00	\$16,525.00	\$0.00	\$2,800.00	\$25,625.00
Metra Commuter Railroad	\$50,000.00	\$0.00	\$0.00	\$0.00	\$50,000.00
Mount Prospect	\$10,000.00	\$4,000.00	\$0.00	\$11,000.00	\$25,000.00
Mount Vernon	\$17,685.00	\$1,315.00	\$0.00	\$1,000.00	\$20,000.00
Naperville	\$36,392.44	\$4,318.46	\$0.00	\$9,289.10	\$50,000.00
North Chicago	\$10,000.00	\$15,000.00	\$0.00	\$0.00	\$25,000.00
Park Ridge	\$10,046.79	\$1,346.47	\$17.24	\$13,581.50	\$24,992.00
Western Springs	\$5,993.51	\$0.00	\$0.00	\$3,701.49	\$9,695.00
<b>Total</b>	<b>\$294,295.54</b>	<b>\$130,697.68</b>	<b>\$14,965.24</b>	<b>\$159,291.54</b>	<b>\$599,250.00</b>
<b>Relative percentage</b>	<b>49.1%</b>	<b>21.8%</b>	<b>2.5%</b>	<b>26.6%</b>	<b>100.0%</b>

Note: \* Education Totals also Include "Other" Amounts

Approximately 71 percent (70.9%) of the project's total budget was devoted to education activities and 29 percent (29.1%) to enforcement activities. Approximately half the total budget was spent on supplies and equipment and the other half was devoted toward the labor required to conduct enforcement actions or bring educational messages to the community. Table 6 provides a summary of the educational outreach made through Operation Lifesaver activities.

Table 6. Combined education budget for Phase 1 and 2 with results.

City	Education* Materials \$	Education* Labor \$	Operation Lifesaver		
			Presenters Trained	Presentations Made	Audience Reached
Arlington Heights - Original	\$8,250.00	\$5,610.00	4	119	3,610
Arlington Heights - Signage	\$2,300.00	\$0.00	0	3	120
Bartlett	\$23,825.00	\$900.00	9	5	925
Decatur	\$31,000.00	\$1,000.00	0	9	380
Des Plaines	\$20,800.00	\$7,200.00	2	6	255
Dixmoor	\$3,420.00	\$7,180.00	2	6	541
Dolton	\$0.00	\$3,500.00	0	0	0
Downers Grove	\$2,509.00	\$4,611.00	0	31	2,034
Elburn	\$3,243.00	\$7,264.00	3	0	0
Evergreen Park	\$6,484.00	\$1,444.00	2	42	9,091
Frankfort	\$1,580.00	\$3,000.00	0	0	0
Galesburg	\$1,562.80	\$12,253.75	3	5	508
Glenwood	\$2,076.00	\$220.00	0	13	515
Healthworld - Kiosk	\$14,003.00	\$14,000.00	0	570	4,000
Healthworld - Monitors	\$0.00	\$5,500.00	0	117	7,000
Illinois Operation Lifesaver	\$20,000.00	\$0.00	0	0	0
LaGrange	\$4,500.00	\$6,950.00	4	34	700
Lansing	\$2,325.00	\$7,560.00	2	101	1,806
Macomb	\$6,300.00	\$16,525.00	3	16	595
Metra Commuter Railroad	\$50,000.00	\$0.00	0	0	10,000
Mount Prospect	\$10,000.00	\$4,000.00	5	31	5,050
Mount Vernon	\$17,685.00	\$1,315.00	4	16	4,435
Naperville	\$36,392.44	\$4,318.46	2	10	300
North Chicago	\$10,000.00	\$15,000.00	2	24	1,126
Park Ridge	\$10,046.79	\$1,346.47	3	12	760
Western Springs	\$5,993.51	\$0.00	0	0	5,000
<b>Total</b>	<b>\$294,295.54</b>	<b>\$130,697.68</b>	<b>50</b>	<b>1,170</b>	<b>58,751</b>
<b>Relative Budget Percentage</b>	<b>49.1%</b>	<b>21.8%</b>			

Note: \* Education Totals also Include a Small Amount of "Other" Amounts

The education figures for audience reached through Operation Lifesaver presentations reflects just the number of people who received a high quality one-on-one or small group educational exposure from a trained Operation Lifesaver presenter, or received a copy of a video message developed with PEERS funds. In contrast, the number of individuals who received a message through a mass mailing or viewing of a continuous loop type feature, or who heard a PEERS railroad safety message while on hold, are not included due to the difficulty in accurately measuring the audience reached. The combined population of all 21 communities receiving a PEERS grant is approximately 760,000.

Enforcement was a natural selection for many grantees, since the grants were largely awarded to police departments who are familiar with receiving grants to conduct special enforcement details to prevent drunken driving, etc. Table 7 provides a summary of the enforcement budget.

Table 7. Combined enforcement budget for Phase 1 and 2 with results.

City	Enforcement Materials \$	Enforcement Labor \$	Citations Issued	Warnings Issued	Officer Hours
Arlington Heights - Original	\$0.00	\$11,765.00	55	205	352.25
Arlington Heights - Signage	\$0.00	\$7,921.00	28	29	159.75
Bartlett	\$0.00	\$900.00	8	32	22.50
Decatur	\$500.00	\$7,500.00	83	140	150.00
Des Plaines	\$0.00	\$12,000.00	33	69	330.00
Dixmoor *	\$3,600.00	\$10,800.00	0	0	0.00
Dolton *	\$0.00	\$11,200.00	0	0	0.00
Downers Grove	\$0.00	\$18,505.00	122	69	448.00
Elburn	\$72.00	\$7,477.00	41	399	272.00
Evergreen Park	\$0.00	\$0.00	0	0	0.00
Frankfort	\$0.00	\$450.00	0	0	25.00
Galesburg	\$0.00	\$6,183.45	43	112	154.00
Glenwood	\$8,976.00	\$1,348.00	5	0	36.00
Healthworld - Kiosk	\$0.00	\$0.00	0	0	0.00
Healthworld - Monitors	\$0.00	\$0.00	0	0	0.00
Illinois Operation Lifesaver	\$0.00	\$0.00	0	0	0.00
LaGrange	\$1,800.00	\$6,750.00	124	0	189.50
Lansing	\$0.00	\$15,120.00	35	0	413.00
Macomb	\$0.00	\$2,800.00	52	7	127.00
Metra Commuter Railroad	\$0.00	\$0.00	0	0	0.00
Mount Prospect	\$0.00	\$11,000.00	200	28	144.00
Mount Vernon	\$0.00	\$1,000.00	0	0	52.00
Naperville	\$0.00	\$9,289.10	50	0	173.00
North Chicago	\$0.00	\$0.00	0	0	0.00
Park Ridge	\$17.24	\$13,581.50	1	113	320.00
Western Springs	\$0.00	\$3,701.49	22	33	90.00
<b>Total</b>	<b>\$14,965.24</b>	<b>\$159,291.54</b>	<b>902</b>	<b>1,236</b>	<b>3,458.00</b>
<b>Relative percentage</b>	<b>2.5%</b>	<b>26.6%</b>			

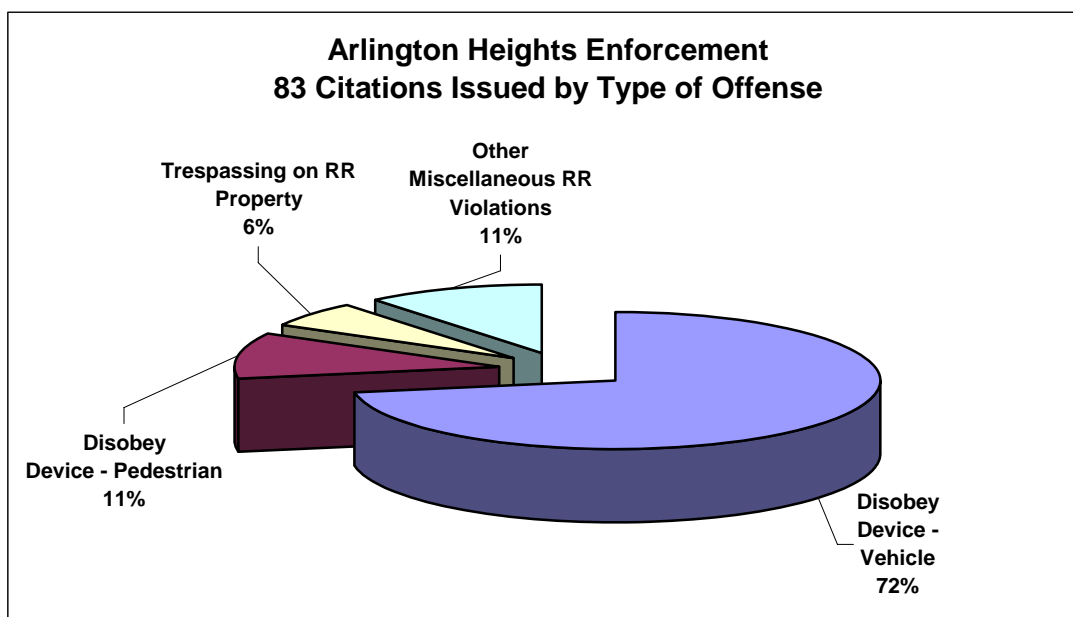
Note: \* Number of citations and warnings issued in Dixmoor and Dolton is not available.

Eighteen of twenty communities receiving funds to conduct enforcement campaigns reported issuing 2,138 citations or warnings to motorists or pedestrians observed violating traffic laws during 3,458 hours of enforcement. The average cost per hour of enforcement labor for these 18 communities was \$39.70. The average number of citations or warnings issued per hour of labor was .62. The majority of law enforcement details were run on overtime and in addition to the community's regular policing efforts. The next section provides a brief summary of each subgrantee's efforts, including the contact information and details of each grant.

## 6. SUBGRANTEE SYNOPSIS

### Arlington Heights

- PEERS grant 2003-01 executed 6/12/2003 for \$25,625 and PEERS Grant 2003-09 executed 1/21/2004 for \$10,221.
- Contacts: Commander Richard Niedrich and Sgt. Mike Shabez, Arlington Heights Police Department.
- Education and Enforcement program began September 1, 2003 and ran until August 30, 2004.
- Education efforts included training 4 staff members as Operation Lifesaver presenters and conducting 122 presentations that reached an audience of at least 3,730 individuals.
- Enforcement efforts included approximately 512 hours of enforcement during which 83 citations and 234 warnings were issued to pedestrians and motorists. A breakdown of the type of offense for which citations were issued is provided below.



- Violation monitoring occurred between July 1, 2003 and October 31, 2004 at Arlington Heights Road, Dunton Street and Evergreen Avenue in Arlington Heights. Preliminary results of the monitoring were provided by Volpe and are presented below.

Time Period	Violations/Train			Total Observations
	Type 1	Type 2	Type 3	
Before (7/1/2003 - 8/31/2003)	0.46	1.40	0.78	6,961
During (9/1/2003 - 8/31/2004)	0.48	1.10	0.36	45,234
After (9/1/2004 - 10/31/2004)	0.53	1.00	0.22	8,627
Net Change from Before to After	15.2%	-28.6%	-71.8%	60,822

Note:

Type 1 Violation = Gates Up / Lights Flashing = a 15% Increase from Baseline Violation Rate

Type 2 Violation = Gates Descending / Lights Flashing = a 29% Decrease

Type 3 Violation = Gates Down / Lights Flashing = 72% Decrease

The monitoring program shows a significant decrease of Type 2 and Type 3 violations with an increase in Type 1 violations during the study period. This indicates that education and enforcement programs were clearly able to achieve significant reductions in the most serious types of traffic law violations at the three crossings monitored in Arlington Heights.

### **Bartlett**

- PEERS grant 2003-02 executed 6/13/2003 for \$25,625.
- Contact: Paula Schumacher, Assistant Village Administrator.
- Education and enforcement program ran between December 1, 2003 and November 30, 2004.
- Education efforts included training 9 staff members as Operation Lifesaver presenters and conducting 5 presentations that reached an audience of 925 individuals.
- Enforcement efforts included approximately 23 hours of enforcement during which 8 citations and 32 warnings were issued to pedestrians and motorists.
- Violation monitoring occurred between October 1, 2004 and January 31, 2005 at Oak Avenue and Western Avenue in Bartlett. Data recorded at Bartlett has largely not been processed and has been archived by Volpe for future use by FRA.

### **Decatur**

- PEERS grant 2003-08 executed 12/12/2003 for \$40,000.
- Contact: John A. Smith, Assistant City Manager for Public Services.
- Education and enforcement program began March 2004 and ran until December 31, 2004.
- Education efforts included utilizing a cadre of certified Operation Lifesaver presenters in the Decatur area who made at least 9 presentations that reached an audience of at least 380 individuals.
- Enforcement efforts included approximately 150 hours of enforcement during which 83 citations and 140 warnings were issued to pedestrians and motorists.
- Violation monitoring: none.

### **Des Plaines**

- PEERS grant 2003-05 executed 1/26/2004 for \$40,000.
- Contact: Eric Palm, Media Coordinator.
- Education and enforcement program ran from March 2004 through February 28, 2005.
- Education efforts included training 2 staff members as Operation Lifesaver presenters and conducting 6 presentations that reached an audience of at least 255 individuals.
- Enforcement efforts included approximately 330 hours of enforcement during which 33 citations and 69 warnings were issued to pedestrians and motorists.
- Violation monitoring: none.

### **Dixmoor**

- PEERS grant 2003-10 executed 1/14/2004 for \$25,000.
- Contact: John Thompson, Director of Economic Development.
- Education and enforcement program ran from March 2004 through February 28, 2005.
- Education efforts included training 2 staff members as Operation Lifesaver presenters and conducting at least 6 presentations that reached an audience of at least 541 individuals.

- Enforcement efforts included an unknown number of hours of enforcement during which an unknown number of citations and warnings were issued to pedestrians and motorists.
- Violation monitoring: none.

### **Dolton**

- PEERS grant 2003-11 executed 3/31/2004 for \$14,700.
- Contact: Bert Herzog, Grant Coordinator.
- Education and enforcement program ran from March 2004 through September 30, 2004.
- Education efforts included training x staff members as Operation Lifesaver presenters and conducting an unknown number of presentations that reached an unknown audience size.
- Enforcement efforts included an unknown number of hours of enforcement during which an unknown number of citations and warnings were issued to pedestrians and motorists.
- Violation monitoring: none.

### **Downers Grove**

- PEERS grant 2003-03 executed 6/3/2003 for \$25,625.
- Contacts: Doug Kozlowski, Public Information Officer; Sgt Jim Nehls of the Downers Grove Police Department; and Susan Brassfield, Grants Coordinator.
- Education and enforcement program ran from September 2003 through February 28, 2005.
- Education efforts included utilizing an existing cadre of certified Operation Lifesaver presenters who conducted 31 presentations that reached an audience of at least 2,034 individuals.
- Enforcement efforts included approximately 448 hours of enforcement during which 122 citations and 69 warnings were issued to pedestrians and motorists.
- Violation monitoring: Baseline violation data was collected during June and July 2003 from the photo enforcement site at Fairview Avenue. However, the photo enforcement system never became operational so there was no implementation violation data, or post-implementation effectiveness data collected.

### **Elburn**

- PEERS grant 2003-13 executed 1/16/2004 for \$18,056.
- Contact: Officer Sue Williams, Elburn Police Department.
- Education and enforcement program ran from March 2004 through December 2004.
- Education efforts included training 3 staff members as Operation Lifesaver presenters and conducting an unknown number of presentations that reached an unknown audience.
- Enforcement efforts included approximately 272 hours of enforcement during which 41 citations and 399 warnings were issued to pedestrians and motorists.
- Violation monitoring: none.

The following text is quoted from Elburn Police Chief James R. Linane, December 29, 2004.

*During 2004, the Village of Elburn received an Illinois Commerce Commission PEERS grant for \$18,057 for railroad safety, education, training and enforcement. We have completed the grant and I am providing as part of this memo a summary of the police department's activity reference this grant.*



*I feel that the entire police department did an excellent job in promoting Operation Lifesaver as part of the PEERS grant and I believe the information contained below will attest to that. I want to particularly single out Officer Sue Williams as grant coordinator for her efforts assuring that all of the administrative details and coordination of personnel was handled as efficiently as it was. I sincerely believe that the efforts of all the officers and village have had an impact on railroad crossing safety in Elburn.*

*In comparison to before we started the PEERS grant and Operation Lifesaver there has been an obvious improvement in compliance at the railroad crossings. During this grant period, Elburn police officers not only provided visual reminders along with actual enforcement during their directed patrol, but also carried out the goals of Operation Lifesaver while on routine patrol. The message I put out and goals given to officers in regards to our diligently addressing this problem was:*

- Failure to enforce or take action on traffic regulations (R/R crossings in this case) is tacit approval for motorists to continue violating the law;*
- In regards to any type of enforcement or remedial actions, the audience is not just those being dealt with but everyone else that sees this enforcement or activity in progress.*

*With the efforts of the Elburn officers, we not only took immediate and active actions on observed railroad crossing violations but we also sent a message to every other motorist that observed our officers taking action on these stops, that Elburn is serious about railroad safety.*

*I received a number of compliments on our efforts from a number of sources but none more interesting or appreciated in my opinion than those directly or indirectly received from some of the Union Pacific train engineers and the rail workers in the area who noticed our efforts. It occurred on numerous occasions that as a train engineer approached the grade crossings that officers would pull over a violator and the engineers would blow their whistle in appreciation and give the officers the “thumbs up” as they went through the crossing.*

*If a grade crossing accident is going to occur, it's the engineer, conductor and the railroad that will be directly affected along with anyone else associated with the victims of this type of crash. The fact that we not only have deterred or reduced the possibility of these types of tragedies from occurring as being positive but to also have appreciation expressed by actual railroad personnel is very rewarding and satisfying to the Elburn police officers.*

*During the month of September, the Elburn Police Department declared the month as “Railroad Safety Campaign Month” and tried a different approach to driving home the importance of railroad crossing safety. On every traffic stop, officers handed out reminder items to reinforce the Operation Lifesaver message. These reminders included, key chains, travel coffee mugs (with donuts), Frisbees, coloring books, crayons, pencils, suckers and safety brochures. This approach proved to bring out interesting responses from the violators.*

*Many of them seemed puzzled that they were receiving these items after being pulled over for a violation. Some of the violators asked “did I win something?” Needless to say these items will probably make their encounter with the Elburn Police Department more memorable but also the message of railroad crossing safety will stick with them longer.*

*The police officers actually had their own interesting spin on this in that they were not accustomed to violators being so accommodating, cooperative and appreciative of the officer's efforts and the Operation Lifesaver goals. They actually felt an immediate sense of satisfaction and reward for their efforts that they normally do not receive with other routine traffic stops. That being said it would be safe to say though that 91% of the violators received warning citations from the officers and the rest receive actual citations for violations of the railroad crossings.*

Elburn Enforcement Summary by Quarter.

Period (2004)	Type 1 Violation		Type 2 Violation		Type 3 Violation		Type 4 Violation		Total	
	Warnings	Citations	Warnings	Citations	Warnings	Citations	Warnings	Citations	Warnings	Citations
Jan - March	6	2	4	4	3	0	70	5	83	11
April - June	12	0	7	11	0	0	112	3	131	14
July - September	5	1	7	8	0	2	124	3	136	14
October - December	2	1	1	1	0	0	46	0	49	2
<b>Total</b>	<b>25</b>	<b>4</b>	<b>19</b>	<b>24</b>	<b>3</b>	<b>2</b>	<b>352</b>	<b>11</b>	<b>399</b>	<b>41</b>

Note:

Type 1 Violation = Gates up, lights flashing

Type 2 Violation = Gates descending, lights flashing

Type 3 Violation = Gates down, lights flashing

type 4 = Gates ascending, lights flashing

#### Other Elburn Highlights:

- A total of 68 4-hour Directed Patrol Enforcement Details were conducted during the grant period January through December 2004.
- Fifth grade classes of both elementary schools made field trips to Health World Children's Museum to experience the railroad safety exhibits.
- During National Night Out and Elburn Days, Operation Lifesaver materials were distributed to the public.
- Officers made presentations to various youth groups promoting railroad safety.
- Two officers were trained as Operation Lifesaver presenters and 13 police officers and 21 fire fighters completed the Grade Crossing Collision Investigation course.

#### Evergreen Park

- PEERS grant 2003-14 executed 1/14/2004 for \$7,928.
- Contact: Lt. Wayne Gutkowski, Evergreen Park Police Department.
- Education program ran from March 2004 through December 2004.
- Education efforts included training 2 staff members as Operation Lifesaver presenters and conducting 42 presentations that reached an audience of at least 9,091 individuals.
- Enforcement efforts included: there was no enforcement element.
- Violation monitoring: none.

#### Frankfort

- PEERS grant 2003-15 executed 1/16/2004 for \$5,030.
- Contact: Mary Canino, Frankfort Economic Development and Special Events.
- Education and enforcement program ran from March 2004 through September 2004.

- Education efforts included production of customized video presentations for local schools and a safety brochure for general distribution. It is estimated that an audience of at least 12,599 individuals was reached via distribution of the educational materials.
- Enforcement efforts included approximately 25 hours of enforcement during which no citations or warnings were issued to pedestrians and motorists.
- Violation monitoring: none.

### **Galesburg**

- PEERS grant 2003-23 executed 1/22/2004 for \$20,000.
- Contact: Lt. Dave Christensen, Galesburg Police Department.
- Education and enforcement program ran from March 2004 through September 2004.
- Education efforts included training 3 staff members as Operation Lifesaver presenters and conducting 5 presentations that reached an audience of at least 508 individuals.
- Enforcement efforts included approximately 154 hours of enforcement during which 43 citations and 112 warnings were issued to pedestrians and motorists.
- Violation monitoring: none.

### **Glenwood**

- PEERS grant 2003-16 executed 1/20/2004 for \$12,620.
- Contacts: Phil Russo, Grants Manager and Chief Kevin Welsh, Glenwood Police Department.
- Education and enforcement program ran from March 2004 through September 2004.
- Education efforts included training 0 staff members as Operation Lifesaver presenters and conducting 13 presentations that reached an audience of at least 515 individuals.
- Enforcement efforts included approximately 36 hours of enforcement during which 5 citations were issued to pedestrians and motorists.
- Violation monitoring: none.

### **Health World Children's Museum; Barrington, Illinois**

- PEERS grant 2003-17 executed 1/19/2004 for \$5,500 and PEERS Grant 2003-26 executed 4/9/2004 for \$28,003.
- Contact: Kim Zylke, Executive Vice President.
- Education program ran from March 2004 through February 28, 2005 for the hand held classroom performance monitors and from May 2004 through February 28, 2005 for the educational Kiosk.
- Education efforts included the purchase of hand held performance measurement monitors for use in the Railroad Safety exhibit at Health World, as well as the construction of a portable interactive train safety Kiosk.

Venues of Train Safety Education at Health World's Children Museum: (From Health World's Closeout Report submitted February 7, 2005 by Kym Zylke)

1. ***Full Operation Lifesaver Educational Programs.*** *These programs are highlighted in the Museum's course booklet and are available to visiting schools from all over the greater Chicagoland area. Numerous Health World staff members have been certified to present the Operation Lifesaver program.*
2. ***Interactive, "hands-on" exhibits.*** *Health World dedicated an entire exhibit space to train safety education. Located in the Safety Challenge Exhibit Area, the train exhibit*

*includes the engineer cab of a locomotive along with a passenger car as shown in the photo below. To complete the environment, Health World created a train depot that includes the yellow safety line. Visitors, of all ages, learn about multiple tracks, that trains move faster than they appear, bus safety around tracks and more. These interactive exhibits were designed to reinforce and illustrate lessons being presented. Here students continue to learn and are able to test their train safety skills.*



3. **Staff demonstrations** are another critical part of train safety education at Health World. Throughout the day Operation Lifesaver certified members of our staff, dress in a train conductor's uniform, conduct safety blitzes with visitors. Utilizing the wireless remote system, staff will help interpret information, reinforce positive train safety actions and discuss consequences of unsafe behavior.
4. **Bus Driver Safety Blitzes.** In addition to educating the students visiting the museum, Health World staff also provide drivers with a Bus Driver Train Safety Blitz. Bus drivers are invited into the museum for coffee and review important safety procedures around highway-rail crossings.
5. **Introduction of the Train Safety Kiosk.** In 2004 Health World introduced a traveling Train Safety Kiosk. Interactive software was introduced to a portable station designed to look like a locomotive. Health World is working with school districts to have this interactive experience available for extended periods within schools and school districts. The Kiosk would be targeted to reach schools in close proximity to railroad tracks and possibly too far from visiting the museum.

*As you can see, train safety education is, and will remain, an important aspect of the curriculum activities and programming at Health World Children's Museum. Prior to introducing an*

*exhibit to the museum, Health World works with its Youth Advisory Council (YAC) to assure the messages are age appropriate, the education goals are clear and the messages are meaningful. This combination provides successful tools and resources for engaging young people in learning about choices and the consequences of decisions they will need to make as they mature.*

*Health World Railroad Safety Exhibit and Hand Held Performance Monitors.*



*Health World was awarded \$5,500 by the ICC to purchase a wireless audience response system and facilitate data collection with respect to train safety education. The survey unit was purchased by Health World and then utilized through the learning venues noted above to collect train safety education data. Groups averaging approximately 60 students participated in a survey of approximately 10 questions. These ten questions were provided for review and approval to the ICC prior to implementation. To date (February 2004 – January 2005), approximately 7,000 students have participated in the train safety education research.*

*Upon receipt of the wireless audience response system, Health World educators created an age-appropriate train safety awareness survey for students K-8<sup>th</sup> grade. The survey was facilitated to various groups following a train safety education demonstration, program or exhibit experience.*

*Health World educators facilitate the survey which provides students the opportunity to respond anonymously. The system then collects the data. In the photo above, students visiting Health World are engaged by the Health World educator following the Train Safety Education demonstration in the Train Safety Exhibit. Health World provides 750 – 1,000 children a day with vital health and safety education.*



*Health World was awarded an additional \$28,003 by the ICC to design and develop an interactive train safety kiosk. Health World educators were responsible for evaluating the interactive “hands-on” activities with the Youth Advisory Council members. Software designers were engaged to update the software and incorporate curriculum and visual graphic changes into the new traveling kiosk format pictured below. Health World staff was then responsible for quality assurance, curriculum review, sourcing out the kiosk hardware and producing necessary kiosk manuals.*

*Health World Traveling Railroad Safety Kiosk.*



*The kiosk structure was completed in October 2004 and accompanied by the necessary computer hardware to run the software. The software, which includes numerous train safety safety activities, was installed in late October 2004. During November and December 2004, Health World worked with our Youth Advisory Council members to test the age appropriateness of the software, messaging and assure the curriculum goals were being communicated effectively. In January 2005, modifications and minor changes were finalized on the software.*

*The kiosk has been exhibited on the Health World exhibit floor where close to 4,000 children have utilized the software in just two months. In Spring 2005, Health World is working with Chip Pew, Illinois State Coordinator for Operation Lifesaver, to have the train safety kiosk travel with Health World’s Outreach Coordinator/Educator starting in March 2005.*

### **Illinois Operation Lifesaver**

- PEERS grant 2003-28 executed 4/15/2004 for \$20,000.
- Contacts: Chip Pew, Illinois State Coordinator for Operation Lifesaver.
- Education program ran from May 2004 through February 2005.
- Education efforts included the training of 50 PEERS participants as Operation Lifesaver presenters and their follow-up as certified presenters. A pilot project to install and test the effectiveness of thorny shrubs to deter trespassing, as well as assisting Health World with development of the software used for the Traveling Kiosk, were Operation Lifesaver's main educational contributions.
- Violation monitoring: not applicable.

### **LaGrange**

- PEERS grant 2003-18 executed 2/3/2004 for \$20,000.
- Contact: Lt. Vic Arnold, LaGrange Police Department.
- Education and enforcement program ran from May 2004 through September 2004.
- Education efforts included training 4 staff members as Operation Lifesaver presenters and conducting 34 presentations that reached an audience of at least 700 individuals.
- Enforcement efforts included approximately 189.5 hours of enforcement during which 124 citations were issued to pedestrians and motorists.
- Violation monitoring: none.

The following text is quoted from Lt. Vic Arnold, LaGrange Police Department October 28, 2004.

*We found the grant to be very successful and accomplished much with the money we received. We trained four officers as Operation Lifesaver presenters. These four officers made OL presentations at six local elementary schools and a summer day camp for a total of 18 presentations. We made eight presentations to 14 third grade classes totaling 293 students. Almost 700 children participated in an OL presentation.*

*Eight officers attended the Grade Crossing Collision Investigation Course. We purchased and posted 22 signs at our 10 railroad crossings that stated "LaGrange Arrests Railroad Crossing Violators." We purchased and posted another 25 signs between crossings that stated "Trespassing is Dangerous and Illegal – Stay off the Railroad Tracks."*

*We spent 189.5 hours enforcing railroad crossing violations and issued 124 citations. Information about the grant was published in local newspapers, the Village website and the local Village Spokesman which is a newsletter that goes out to all the residents. Information was also broadcast on the local cable television channel.*

### **Lansing**

- PEERS grant 2003-19 executed 1/24/2004 for \$25,005.
- Contact: Commander Norbert Schlessler, Lansing Police Department.
- Education and enforcement program ran from March 2004 through September 2004.
- Education efforts included training 2 staff members as Operation Lifesaver presenters and conducting 101 presentations that reached an audience of at least 1,806 individuals.
- Enforcement efforts included approximately 413 hours of enforcement during which 35 citations were issued to pedestrians and motorists.

- Violation monitoring: none.

### **Macomb**

- PEERS grant 2003-04 executed 6/6/2003 for \$25,625.
- Contact: Robert Mahrt, Director of Community Development.
- Education and enforcement program ran from September 2003 through February 28, 2005.
- Education efforts included training 3 staff members as Operation Lifesaver presenters and conducting 16 presentations that reached an audience of at least 595 individuals.
- Enforcement efforts included approximately 127 hours of enforcement during which 52 citations and 7 warnings were issued to pedestrians and motorists.
- Violation monitoring occurred between July 1, 2003 and October 31, 2004 at Jackson, Ward and Lafayette Streets. Data recorded at Macomb has largely not been processed and has been archived by Volpe for future use by FRA.

### **Metra - Northeast Illinois Regional Commuter Railroad Corporation (NIRC)**

- PEERS grant 2003-27 executed 4/5/2004 for \$50,000.
- Contact: Dennis Mogan, Director of Safety and Rules.
- Education effort consisted "...in summary this grant provided expansion of our school safety education program. This included the distribution of 10,000 video tapes (English and Spanish language versions) to 3,260 schools in our six county service area (Cook, DuPage, Kane, Lake and McHenry counties)."
- Enforcement efforts included: no enforcement element.
- Violation monitoring: none.

### **Mount Prospect**

- PEERS grant 2003-20 executed 1/14/2004 for \$25,000.
- Contacts: Deputy Chief John Dahlberg, Mount Prospect Police Department.
- Education and enforcement program ran from April 2004 through September 2004.
- Education efforts included training 5 staff members as Operation Lifesaver presenters and conducting 31 presentations that reached an audience of at least 5,050 individuals. Enforcement efforts included approximately 144 hours of enforcement during which 200 citations and 28 warnings were issued to pedestrians and motorists.
- Violation monitoring: none.

### **Mount Vernon**

- PEERS grant 2003-25 executed 2/2/2004 for \$20,000.
- Contacts: Capt. Steve Lamar, Mount Vernon Police Dept. and Lt. Kevin Sargent, Mount Vernon Fire Department.
- Education and enforcement program ran from April 2004 through February 28, 2005.
- Education efforts included training 4 staff members as Operation Lifesaver presenters and conducting 16 presentations that reached an audience of at least 4,435 individuals.
- In addition to the core education and enforcement program, the Mount Vernon Police Department used PEERS funds to test the concept of a community sponsor adopting a school and providing them with a focused railroad safety experience. Mount Vernon City Schools, District 80 and the police department worked together, along with Amtrak, Metra and Health World Children's Museum, to bring a group of 75 from Mount Vernon to Health World for a railroad safety lesson. The group consisted of 35 students each



accompanied by an adult, along with five chaperones from the school district. Mount Vernon is approximately 350 miles south of Barrington, Illinois where Health World is located.

- Mount Vernon also made extensive use of commercial media outlets, in particular a weekly safety program on station WDML, provided the opportunity to address railroad safety issues on a regular and sustained basis. Of particular note were two series of Operation Lifesaver public service announcements that ran in two local Mount Vernon papers. A series of 13 Operation Lifesaver messages that appeared in the Mount Vernon Morning-Sentinel in December 2004 and January 2005 are included in Attachment 2.
- Enforcement efforts included approximately 52 hours of enforcement during which no citations or warnings were issued to pedestrians and motorists.
- Violation monitoring: none.

### **Naperville**

- PEERS grant 2003-06 executed 12/9/2003 for \$50,000.
- Contact: Sgt. Vince Gortner, Naperville Police Department.
- Education and enforcement program ran from March 2004 through December 2004.
- Education efforts included training 2 staff members as Operation Lifesaver presenters and conducting 10 presentations that reached an audience of at least 300 individuals.
- Education – Video and Audio Public Service Announcements: “It was anticipated that the production of the video and audio public service announcements by an outside vendor would require several months to complete, so our first order of business for the PEERS program was to prepare a statement of work and solicit quotes and proposals from local commercial graphics vendors. The proposal submitted by American Business Graphics of Lisle, IL was selected as representing the best value for the PEERS program, and ABG, Inc. was awarded a contract for the production of audio and video public service announcements along with the development of several printed items for distribution in utility bill mailings and by hand at area commuter stations.”

The following text is quoted from Sgt. Vince Gortner, Naperville Police Department January 31, 2005.

*Costs for the production of the video public service announcements exceeded original estimates due to the inclusion of several computerized graphic animation (CGA) scenes. The scenarios in the CGA scenes depict dangerous violations of railroad grade crossing rules, and it was determined that the CGA development costs were lower than the costs required to safely stage these dangerous acts using live actors, vehicles and equipment. Every effort was made to offset the CGA costs by utilizing stock footage made available Metra Commuter Rail where possible.*

*The completed six-minute video public service announcement was first aired on local access cable television as part of the PEERS grant presentation to the City of Naperville Transportation Advisory Board at their meeting in December 2004. The video continues to air periodically on local television and also plays in continuous loop at the downtown Naperville commuter depot.*

- Education – Utility Bill Inserts: “American Business Graphics, Inc. of Lisle, IL prepared a small educational railroad safety flyer that was distributed to 60,000 Naperville

households as an insert with their monthly utility bills. A copy of the insert is attached for review.

- *Education – Media Press Releases:* An overview of the PEERS railroad safety grant was distributed to local print media outlets in July 2004. This media prompted an article on the topic of railroad safety and grade crossing safety that was published in the Naperville Sun newspaper on September 30, 2004. A copy of the article is attached for review.
- *Education – Operation Lifesaver:* Due to schedule conflicts beyond our control, the Naperville Police Department was unable to train officers as Operation Lifesaver presenters until August 2004. We were also unable to schedule Operation Lifesaver presentations in our target schools prior to the close of the PEERS grant, but we do now have two officers available to present the Operation Lifesaver program as opportunities arise. In contrast to enforcement operations, we found this aspect of PEERS railroad safety grant to be most challenging, given the limited number of instructors available and the difficulties involved in introducing new material to already full high school instruction schedules.
- *Education – Railroad Safety Diorama:* Given the challenges faced in expending funds originally budgeted for public education, the Naperville Police Department proposed the construction of a model railroad safety diorama to be displayed at traffic safety and public education functions for many years to come.

The Naperville Police Department called on some of its members that are skilled in the construction of model railroad layouts and equipment to design and build a 15' x 2' modular portable railroad safety diorama. The purpose of the diorama is to illustrate the dangers of violating railroad grade crossing safety equipment, and to draw an audience for other aspects of our railroad safety program. We feel that an operating diorama can capture audience attention much more effectively than images on a projector screen ever could.

The diorama was constructed to feature working HO (1:87) scale models of Metra Commuter Rail locomotives and coaches operating in push/pull fashion up and down the length of the display. The passing trains trigger an operating grade crossing at the center of the display that features operating flashing lights and warning bells. Although our attached expense report details 75 hours of time billed to this project, please understand that this diorama ultimately required several hundred hours of time to design and build. The officers that participated in the construction of this diorama did so because they enjoy the hobby and truly appreciate the opportunity to put their skills and talents to work for the purpose of railroad safety. Accordingly, they volunteered much of their own time and were compensated for approximately 30% of the total time invested in this project.

- *Enforcement efforts included approximately 173 hours of enforcement during which 50 citations and 0 warnings were issued to pedestrians and motorists. A total of three full-week enforcement periods were scheduled in the months of May, June and July 2004.*
  - *In May 2004, a one-week enforcement program focused on pedestrian trespass on the BNSF Railroad at the Mill Street overpass, which is adjacent to Naperville North High School. This campaign involved 54 hours of dedicated patrol time at a cost of \$2,682.70 and resulted in numerous contacts with juvenile offenders and three adult offenders. The juvenile offenders were identified and contact made*

*with parents/guardians to discuss the safety issues at hand. The focus of this campaign was to gauge the volume of trespass violations related to the adjacent high school to be used in subsequent safety education programs. One unexpected observation resulting from this program was the number of violators traveling to a nearby junior high school that had not previously been considered as a focal point for safety education programs.*

- *In June 2004, a one-week enforcement program focused on pedestrian and motor vehicle violations of the safety devices located at the BNSF Railroad / Loomis Street grade crossing. This campaign involved 54 hours of dedicated patrol time at a cost of \$2,688.61 and resulted in 29 citations issued to adult offenders. Over three-quarters of the offenders were pedestrian commuters, a group that is clearly the focus of our adult education efforts.*
- *In July 2004, a one-week enforcement program focused on pedestrian and motor vehicle violations of the safety devices located at the BNSF Railroad / Loomis Street grade crossing. This campaign involved extended hours of operation including 79 hours of dedicated patrol time at a cost of \$3,917.19 and resulted in 18 citations issued to adult offenders. Enforcement outside of peak commuter traffic hours revealed a moderate incidence of motor vehicle violations during mid-day hours.*

*Overall, the Naperville Police Department found the enforcement operations to be the simplest and most straightforward component of the PEERS railroad safety grant program. We were able to staff these enforcement details from a large pool of available off-duty police officers, requiring only safety training and an operational briefing. We did place great emphasis on work safety rules for law enforcement operations on and near railroad property, as many of our officers were unfamiliar with railroad operating procedures. We have attached a sample of the briefing document that was developed for distribution to officers volunteering for PEERS enforcement details for review.*

- Violation monitoring: none.

### **North Chicago**

- PEERS grant 2003-07 executed 4/5/2004 for \$25,000.
- Contact: Rob May, Director of Economic Development.
- Education program ran from May 2004 through February 28, 2005.
- Education efforts included training 2 staff members as Operation Lifesaver presenters and conducting 24 presentations that reached an audience of at least 1,126 individuals.
- Enforcement efforts included: no enforcement element.
- Violation monitoring: none.

### **Park Ridge Recreation and Park District**

- PEERS grant 2003-21 executed 2/19/2004 for \$24,992.
- Contact: Renie Schreiber, Manager of Public Relations.
- Education and enforcement program ran from March 2004 through December 2004.
- Education efforts included training 3 staff members as Operation Lifesaver presenters and conducting 12 presentations that reached an audience of at least 760 individuals.
- Enforcement efforts included approximately 320 hours of enforcement during which 1 citation and 113 warnings were issued to pedestrians and motorists.

- Violation monitoring: none.

### **Western Springs**

- PEERS grant 2003-22 executed 2/11/2004 for \$9,695.
- Contacts: Ingrid Velkme, Director of Administrative Services.
- Education and enforcement program ran from March 2004 through December 2004.
- Education efforts included training 0 staff members as Operation Lifesaver presenters and conducting 1 presentation that reached an audience of at least 5,000 individuals primarily through the distribution of a special edition railroad safety calendar comprised of sketches drawn by school children and distributed to each household in Western Springs.
- Enforcement efforts included approximately 90 hours of enforcement during which 22 citations and 33 warnings were issued to pedestrians and motorists.
- Violation monitoring: none.

## **7. CONCLUSION**

The goal of developing, implementing and testing a core highway-rail grade crossing safety program based on education and enforcement which could be easily adaptable to numerous communities, was accomplished. This template may serve as a baseline for future efforts. The goal of education and enforcement elements is to modify, alter or shape behavior necessary to cross railroad tracks safely and legally. How these communities have gone about this has shown the diversity in which the use of funding was utilized. What may have been a valuable tool in one community was found not to be effective or even considered in another community.

Education and enforcement efforts are labor intensive and finding the right balance between the two is very challenging. The emphasis is to help the communities recognize the lasting effect and value obtained from increased railroad safety programming. Examples of successful PEERS communities, such as Arlington Heights, proved that providing the impetus to move railroad safety into the forefront can be done if seed funds are made available.

Data analyzed at three highway-rail crossings in Arlington Heights indicate that its education and enforcement program did reduce violations in a statistically significant manner. A 72 percent (72%) reduction in type 3 (drive around) violations, along with a 29 percent (29%) reduction in type 2 violations (gates are descending, but not completely down) was achieved. However, Type 1 violations (gates are still up, but lights have begun to flash) showed an increase of 15 percent (15%) over the baseline rate of violations.

Implementation of the education and enforcement elements required training of staff both in Operation Lifesaver presentation techniques, as well as best practices for effective enforcement campaigns when on or near the tracks. Most of these types of “station blitzes” were modeled after Metra’s long standing programs and conducted primarily in the Chicago suburban communities. Fifty people were trained as Operation Lifesaver presenters and another 35 to 40 completed the Grade Crossing Collision Investigation (GCCl) course.

The enforcement element is consistent and does not deviate from traditional police responsibilities to enforce laws. If residents violate traffic laws, then they are issued citations. Writing tickets for violating railroad laws should be no different. People typically do not run red lights because of a long standing and sustained effort to remind drivers of the punitive repercussions for such actions. However, allowing a commuter to run across a crosswalk when crossing bells and lights are activated has been accepted for so long that it is perceived as acceptable behavior.

Naperville, for example, found applying enforcement easier and more straight forward than the education. This is probably true of most police departments who are used to dealing with special grants to conduct other enforcement initiatives, such as seat belt and DUI campaigns. Another community, Mount Prospect, integrated the Operation Lifesaver program into the duties of their community liaison officers so that they could go to schools and speak about railroad safety much like they go talk about the D.A.R.E program.

The educational side of highway-rail crossing safety is an area in which “creative redundancy,” conveying the same safety message many different ways, has great potential and flexibility. With reality television and mass media creating the stimuli driven culture, traditional methods of educating people needs to be overhauled. An interactive kiosk was developed by Health World Children’s Museum, and has captured the interest of school age children.

Overall, 71 percent (71%) of PEERS grants went toward education and 29 percent (29%) toward enforcement. Labor costs were 47 percent (47%) of the total grant expenditures, largely due to a very significant amount of enforcement and education being conducted by police officers on overtime. If labor can be performed as part of regular duties, a great savings could be achieved.

## ***ATTACHMENTS***

1. ICC Call For Proposals
2. News Clips and Media Materials
3. ICC Regular Updates to PEERS Participants